Year 5 Curriculum Overview

		Statutory Objectives
Reading	**Word reading**	• apply their growing knowledge of root words, prefixes and suffixes (morphology and etymology), as listed in English Appendix 1, both to read aloud and to understand the meaning of new words that they meet.

	Comprehension	• maintain positive attitudes to reading and understanding of what they read by:
		  o continuing to read and discuss an increasingly wide range of fiction, poetry, plays, non-fiction and reference books or textbooks
		  o reading books that are structured in different ways and reading for a range of purposes
		  o increasing their familiarity with a wide range of books, including myths, legends and traditional stories, modern fiction, fiction from our literary heritage, and books from other cultures and traditions
		  o recommending books that they have read to their peers, giving reasons for their choices
		  o identifying and discussing themes and conventions in and across a wide range of writing
		  o making comparisons within and across books
		  o learning a wider range of poetry by heart
		  o preparing poems and plays to read aloud and to perform, showing understanding through intonation, tone and volume so that the meaning is clear to an audience
		• understand what they read by:
		  o checking that the book makes sense to them, discussing their understanding and exploring the meaning of words in context
		  o asking questions to improve their understanding
		  o drawing inferences such as inferring characters' feelings, thoughts and motives from their actions, and justifying inferences with evidence
		  o predicting what might happen from details stated and implied
		  o summarising the main ideas drawn from more than one paragraph, identifying key details that support the main ideas
		  o identifying how language, structure and presentation contribute to meaning
		• discuss and evaluate how authors use language, including figurative language, considering the impact on the reader
		• distinguish between statements of fact and opinion
		• retrieve, record and present information from non-fiction
		• participate in discussions about books that are read to them and those they can read for themselves, building on their own and others' ideas and challenging views courteously
		• explain and discuss their understanding of what they have read, including through formal presentations and debates, maintaining a focus on the topic and using notes where necessary
		• provide reasoned justifications for their views.

Writing	**Transcription**	**Spelling (see English Appendix 1)**
		• use further prefixes and suffixes and understand how to add them (English Appendix 1)
		• spell further homophones
		• spell words that are often misspelt (English Appendix 1)
		• place the possessive apostrophe accurately in words with regular plurals [for example, girls', boys'] and in words with irregular plurals [for example, children's]
		• use the first two or three letters of a word to check its spelling in a dictionary
		• write from memory simple sentences, dictated by the teacher, that include words and punctuation taught so far.
		Handwriting
		• write legibly, fluently and with increasing speed by:
		  o choosing which shape of a letter to use when given choices and deciding whether or not to join specific letters
		  o choosing the writing implement that is best suited for a task.

	Composition	• plan their writing by:
		  o identifying the audience for and purpose of the writing, selecting the appropriate form and using other similar writing as models for their own
		  o noting and developing initial ideas, drawing on reading and research where necessary
		  o in writing narratives, considering how authors have developed characters and settings in what pupils have read, listened to or seen performed
		• draft and write by:
		  o selecting appropriate grammar and vocabulary, understanding how such choices can change and enhance meaning
		  o in narratives, describing settings, characters and atmosphere and integrating dialogue to convey character and advance the action
		  o précising longer passages
		  o using a wide range of devices to build cohesion within and across paragraphs
		  o using further organisational and presentational devices to structure text and to guide the reader [for example, headings, bullet points, underlining]
		• evaluate and edit by:
		  o assessing the effectiveness of their own and others' writing
		  o proposing changes to vocabulary, grammar and punctuation to enhance effects and clarify meaning
		  o ensuring the consistent and correct use of tense throughout a piece of writing
		  o ensuring correct subject and verb agreement when using singular and plural, distinguishing between the language of speech and writing and choosing the appropriate register
		• proof-read for spelling and punctuation errors
		• perform their own compositions, using appropriate intonation, volume, and movement so that meaning is clear.

	VGP	• develop their understanding of the concepts set out in English Appendix 2 by:
		  o recognising vocabulary and structures that are appropriate for formal speech and writing, including subjunctive forms
		  o using passive verbs to affect the presentation of information in a sentence
		  o using the perfect form of verbs to mark relationships of time and cause
		  o using expanded noun phrases to convey complicated information concisely
		  o using modal verbs or adverbs to indicate degrees of possibility
		  o using relative clauses beginning with who, which, where, when, whose, that or with an implied (i.e. omitted) relative pronoun learning the grammar for years 5 and 6 in English Appendix 2
		• indicate grammatical and other features by:
		  o using commas to clarify meaning or avoid ambiguity in writing
		  o using hyphens to avoid ambiguity
		  o using brackets, dashes or commas to indicate parenthesis
		  o using semi-colons, colons or dashes to mark boundaries between independent clauses
		  o using a colon to introduce a list
		  o punctuating bullet points consistently
		• use and understand the grammatical terminology in English Appendix 2 accurately and appropriately in discussing their writing and reading.

Subject	Topic	Content
Maths	Place value	- read, write, order and compare numbers to at least 1 000 000 and determine the value of each digit - count forwards or backwards in steps of powers of 10 for any given number up to 1 000 000 - interpret negative numbers in context, count forwards and backwards with positive and negative whole numbers, including through zero - round any number up to 1 000 000 to the nearest 10, 100, 1000, 10 000 and 100 000 - solve number problems and practical problems that involve all of the above - read Roman numerals to 1000 (M) and recognise years written in Roman numerals
	Addition & subtraction	- add and subtract whole numbers with more than 4 digits, including using formal written methods (columnar addition and subtraction) - add and subtract numbers mentally with increasingly large numbers - use rounding to check answers to calculations and determine, in the context of a problem, levels of accuracy - solve addition and subtraction multi-step problems in contexts, deciding which operations and methods to use and why.
	Multiplication & Division	- identify multiples and factors, including finding all factor pairs of a number, and common factors of two numbers - know and use the vocabulary of prime numbers, prime factors and composite (nonprime) numbers - establish whether a number up to 100 is prime and recall prime numbers up to 19 - multiply numbers up to 4 digits by a one- or two-digit number using a formal written method, including long multiplication for two-digit numbers - multiply and divide numbers mentally drawing upon known facts - divide numbers up to 4 digits by a one-digit number using the formal written method of short division and interpret remainders appropriately for the context - multiply and divide whole numbers and those involving decimals by 10, 100 and 1000 - recognise and use square numbers and cube numbers, and the notation for squared and cubed - solve problems involving multiplication and division including using their knowledge of factors and multiples, squares and cubes - solve problems involving addition, subtraction, multiplication and division and a combination of these, including understanding the meaning of the equals sign - solve problems involving multiplication and division, including scaling by simple - fractions and problems involving simple rates
	Fractions – including decimals	- compare and order fractions whose denominators are all multiples of the same number - identify, name and write equivalent fractions of a given fraction, represented visually, including tenths and hundredths - recognise mixed numbers and improper fractions and convert from one form to the other and write mathematical statements > 1 as a mixed number [for example, $\frac{2}{5} + \frac{4}{5} = \frac{6}{5} = 1\frac{1}{5}$] - add and subtract fractions with the same denominator and denominators that are multiples of the same number - multiply proper fractions and mixed numbers by whole numbers, supported by materials and diagrams - read and write decimal numbers as fractions [for example, $0.71 = \frac{71}{100}$] - recognise and use thousandths and relate them to tenths, hundredths and decimal equivalents - round decimals with two decimal places to the nearest whole number and to one decimal place - read, write, order and compare numbers with up to three decimal places - solve problems involving number up to three decimal places - recognise the per cent symbol (%) and understand that per cent relates to 'number of parts per hundred', and write percentages as a fraction with denominator 100, and as a decimal - solve problems which require knowing percentage and decimal equivalents of $\frac{1}{2}$, $\frac{1}{4}$, $\frac{1}{5}$, $\frac{2}{5}$, $\frac{4}{5}$ and those fractions with a denominator of a multiple of 10 or 25.
	Measurement	- convert between different units of metric measure (for example, kilometre and metre; centimetre and metre; centimetre and millimetre; gram and kilogram; litre and millilitre) - understand and use approximate equivalences between metric units and common imperial units such as inches, pounds and pints - measure and calculate the perimeter of composite rectilinear shapes in centimetres and metres - calculate and compare the area of rectangles (including squares), and including using standard units, square centimetres (cm2) and square metres (m2) and estimate the area of irregular shapes - estimate volume [for example, using 1 cm3 blocks to build cuboids (including cubes)] and capacity [for example, using water] - solve problems involving converting between units of time - use all four operations to solve problems involving measure [for example, length, mass, volume, money] using decimal notation, including scaling
	Properties of shape	- identify 3-D shapes, including cubes and other cuboids, from 2-D representations - know angles are measured in degrees: estimate and compare acute, obtuse and reflex angles - draw given angles, and measure them in degrees (°) - identify: - angles at a point and one whole turn (total 360°) - angles at a point on a straight line and $\frac{1}{2}$ a turn (total 180°) - other multiples of 90° - use the properties of rectangles to deduce related facts and find missing lengths and angles - distinguish between regular and irregular polygons based on reasoning about equal sides and angles.
	Position and Direction	- identify, describe and represent the position of a shape following a reflection or - translation, using the appropriate language, and know that the shape has not changed.
	Statistics	- solve comparison, sum and difference problems using information presented in a line graph - complete, read and interpret information in tables, including timetables.
Science	Working Scientifically	- planning different types of scientific enquiries to answer questions, including recognising and controlling variables where necessary - taking measurements, using a range of scientific equipment, with increasing accuracy and precision, taking repeat readings when appropriate - recording data and results of increasing complexity using scientific diagrams and labels, classification keys, tables, scatter graphs, bar and line graphs - using test results to make predictions to set up further comparative and fair tests - reporting and presenting findings from enquiries, including conclusions, causal relationships and explanations of and degree of trust in results, in oral and written forms such as displays and other presentations - identifying scientific evidence that has been used to support or refute ideas or arguments
	Living Things and their Habitats	- describe the differences in the life cycles of a mammal, an amphibian, an insect and a bird - describe the life process of reproduction in some plants and animals

Animals, including humas	• describe the changes as humans develop to old age.	
Properties and changes of materials	• compare and group together everyday materials on the basis of their properties, including their hardness, solubility, transparency, conductivity (electrical and thermal), and response to magnets • know that some materials will dissolve in liquid to form a solution, and describe how to recover a substance from a solution • use knowledge of solids, liquids and gases to decide how mixtures might be separated, including through filtering, sieving and evaporating • give reasons, based on evidence from comparative and fair tests, for the particular uses of everyday materials, including metals, wood and plastic • demonstrate that dissolving, mixing and changes of state are reversible changes • explain that some changes result in the formation of new materials, and that this kind of change is not usually reversible including changes associated with burning and the action of acid on bicarbonate of soda	
Earth and Space	• describe the movement of the Earth, and other planets, relative to the Sun in the solar system • describe the movement of the Moon relative to the Earth • describe the Sun, Earth and Moon as approximately spherical bodies • use the idea of the Earth's rotation to explain day and night and the apparent movement of the sun across the sky.	
Forces	• explain that unsupported objects fall towards the Earth because of the force of gravity acting between the Earth and the falling object identify the effects of air resistance, water resistance and friction, that act between moving surfaces • recognise that some mechanisms, including levers, pulleys and gears, allow a smaller force to have a greater effect.	

Computing	• design, write and debug programs that accomplish specific goals, including controlling or simulating physical systems; solve problems by decomposing them into smaller parts (Physical systems – Makey-makey Kits) • use sequence, selection, and repetition in programs; work with variables and various forms of input and output (Scratch – Developing Games, Kodable) • use logical reasoning to explain how some simple algorithms work and to detect and correct errors in algorithms and programs (Scratch, Kodable) • understand computer networks including the internet; how they can provide multiple services, such as the world wide web; and the opportunities they offer for communication and collaboration (Internet Research and Website design) • select, use and combine a variety of software (including internet services) on a range of digital devices to design and create a range of programs, systems and content that accomplish given goals, including collecting, analysing, evaluating and presenting data and information (3D modelling & Podcasts and Advertising) • use technology safely, respectfully and responsibly; recognise acceptable/unacceptable behaviour; identify a range of ways to report concerns about content and contact. (E-safety – spam, powerful passwords, false photos)

	Rolling Programme Year A	**Rolling Programme Year B**
History	• changes in Britain from the Stone Age to the Iron Age • Ancient Greece – a study of Greek life and achievements and their influence on the western world • a non-European society that provides contrasts with British history – one study chosen from: early Islamic civilization, including a study of Baghdad c. AD 900; Mayan civilization c. AD 900; Benin (West Africa) c. AD 900-1300.	• a study of an aspect or theme in British history that extends pupils' chronological knowledge beyond 1066 (eg World War II OR leisure and entertainment OR rich and poor etc) • the achievements of the earliest civilizations – an overview of where and when the first civilizations appeared and a depth study of **one** of the following: Ancient Sumer; The Indus Valley; Ancient Egypt; The Shang Dynasty of Ancient China • a local history study

	Rolling Programme Year A	**Rolling Programme Year B**

Geography	**Locational knowledge**
	
	• locate the world's countries, using maps to focus on Europe (including the location of Russia), concentrating on their environmental regions, key physical and human characteristics, countries, and major cities
	• name and locate counties and cities of the United Kingdom, geographical regions and their identifying human and physical characteristics, key topographical features (including hills, mountains, coasts and rivers), and land-use patterns; and understand how some of these aspects have changed over time
	
	Place knowledge
	
	• understand geographical similarities and differences through the study of human and physical geography of a region of the United Kingdom
	
	Geographical skills and fieldwork
	
	• describe and understand key aspects of:
	  o physical geography, focus: rivers
	  o human geography, focus on economic activity including trade links
		Locational knowledge
		
		• locate the world's countries, using maps to focus on North and South America concentrating on their environmental regions, key physical and human characteristics, countries, and major cities
		
		Place knowledge
		
		• understand geographical similarities and differences through the study of human and physical geography of a region within North or South America
		
		Geographical skills and fieldwork
		
		• describe and understand key aspects of:
		  o physical geography, focus: mountains
		  o human geography, focus: the distribution of natural resources including energy, food, minerals and water

British Values	We respect the culture & beliefs of others. We treat everybody equally. We know that we are all special. We listen to and respect other people's opinions and values. We understand right from wrong. We understand the consequences of our actions. We understand and respect the roles of people who may help us. We try to help other people.

	Rolling Programme Year A	**Rolling Programme Year B**
Art and Design	• to create sketch books to record their observations and use them to review and revisit ideas	• to create sketch books to record their observations and use them to review and revisit ideas

	- to improve their mastery of art and design techniques, including drawing, painting and sculpture with a range of materials [for example, pencil, charcoal, paint, clay]
	- about great artists, architects and designers in history.
	
	Focus: Textiles – See CQ Essentials Milestone 3
	
	    Sculpture – see CQ Essentials Milestone 3
	
	    Paint – see CQ Essentials Milestone 3
	
	    Drawing – see CQ Essentials Milestone 3
	
	    Printing – See CQ Essentials Milestone 3
		- to improve their mastery of art and design techniques, including drawing, painting and sculpture with a range of materials [for example, pencil, charcoal, paint, clay]
		- about great artists, architects and designers in history.
		
		Focus: Digital media – See CQ Milestone 3
		
		    Paint – see CQ Essentials Milestone 3
		
		    Drawing - see CQ Essentials Milestone 3
		
		    Collage – See CQ Essentials Milestone 3

	Rolling Programme Year A	**Rolling Programme Year B**
Design Technology	**Design** - use research and develop design criteria to inform the design of innovative, functional, appealing products that are fit for purpose, aimed at particular individuals or groups - generate, develop, model and communicate their ideas through discussion, annotated sketches, cross-sectional and exploded diagrams, prototypes, pattern pieces and computer-aided design **Make** - select from and use a wider range of tools and equipment to perform practical tasks [for example, cutting, shaping, joining and finishing], accurately - select from and use a wider range of materials and components, including construction materials, textiles and ingredients, according to their functional properties and aesthetic qualities Focus: Food, materials, construction, textiles, computing (– see CQ Essentials for skills) **Evaluate** - investigate and analyse a range of existing products - evaluate their ideas and products against their own design criteria and consider the views of others to improve their work - understand how key events and individuals in design and technology have helped shape the world **Technical knowledge** - apply their understanding of how to strengthen, stiffen and reinforce more complex structures - understand and use mechanical systems in their products [for example, gears, pulleys, cams, levers and linkages] - understand and use electrical systems in their products [for example, series circuits incorporating switches, bulbs, buzzers and motors] - apply their understanding of computing to program, monitor and control their products. **Cooking and Nutrition** - understand and apply the principles of a healthy and varied diet - prepare and cook a variety of predominantly savoury dishes using a range of cooking techniques - understand seasonality, and know where and how a variety of ingredients are grown, reared, caught and processed.	**Design** - use research and develop design criteria to inform the design of innovative, functional, appealing products that are fit for purpose, aimed at particular individuals or groups - generate, develop, model and communicate their ideas through discussion, annotated sketches, cross-sectional and exploded diagrams, prototypes, pattern pieces and computer-aided design **Make** - select from and use a wider range of tools and equipment to perform practical tasks [for example, cutting, shaping, joining and finishing], accurately - select from and use a wider range of materials and components, including construction materials, textiles and ingredients, according to their functional properties and aesthetic qualities Focus: Food, materials, electronics, mechanics (– see CQ Essentials for skills) **Evaluate** - investigate and analyse a range of existing products - evaluate their ideas and products against their own design criteria and consider the views of others to improve their work - understand how key events and individuals in design and technology have helped shape the world **Technical knowledge** - apply their understanding of how to strengthen, stiffen and reinforce more complex structures - understand and use mechanical systems in their products [for example, gears, pulleys, cams, levers and linkages] - understand and use electrical systems in their products [for example, series circuits incorporating switches, bulbs, buzzers and motors] - apply their understanding of computing to program, monitor and control their products. **Cooking and Nutrition** - understand and apply the principles of a healthy and varied diet - prepare and cook a variety of predominantly savoury dishes using a range of cooking techniques - understand seasonality, and know where and how a variety of ingredients are grown, reared, caught and processed.
Music	- play and perform in solo and ensemble contexts, using their voices and playing musical instruments with increasing accuracy, fluency, control and expression - improvise and compose music for a range of purposes using the inter-related dimensions of music - listen with attention to detail and recall sounds with increasing aural memory - use and understand staff and other musical notations - appreciate and understand a wide range of high-quality live and recorded music drawn from different traditions and from great composers and musicians - develop an understanding of the history of music.	
P.E.	- use running, jumping, throwing and catching in isolation and in combination - play competitive games, modified where appropriate [for example, badminton, basketball, cricket, football, hockey, netball, rounders and tennis], and apply basic principles suitable for attacking and defending - develop flexibility, strength, technique, control and balance [for example, through athletics and gymnastics] - perform dances using a range of movement patterns - take part in outdoor and adventurous activity challenges both individually and within a team - compare their performances with previous ones and demonstrate improvement to achieve their personal best.	

R.E.
(from Durham RE Approved Syllabus)
	Knowledge and Understanding of Religion
	Pupils will demonstrate understanding of some of the beliefs and features of religion through the RE concepts
	Critical Thinking
	In response to the religious material they learn about, pupils are able to express their views and support them using a plausible reason or reasons. They show some awareness of other people's views.
	Personal Reflection
	In relation to religious material studied, pupils are able to reflect on their own feelings, ideas and values and appreciate that not all people think, feel and believe the same.
	Breadth of Study
	• Christianity
	• Hinduism or Sikhism (whichever one was NOT core at Lower KS2)
	• **Aspects** of the following religions at the discretion of the school:
	   o Buddhism
	   o Islam
	   o Judaism

MFL	• listen attentively to spoken language and show understanding by joining in and responding • explore the patterns and sounds of language through songs and rhymes and link the spelling, sound and meaning of words • engage in conversations; ask and answer questions; express opinions and respond to those of others; seek clarification and help • speak in sentences, using familiar vocabulary, phrases and basic language structures • develop accurate pronunciation and intonation so that others understand when they are reading aloud or using familiar words and phrases • present ideas and information orally to a range of audiences • read carefully and show understanding of words, phrases and simple writing • appreciate stories, songs, poems and rhymes in the language • broaden their vocabulary and develop their ability to understand new words that are introduced into familiar written material, including through using a dictionary • write phrases from memory, and adapt these to create new sentences, to express ideas clearly • describe people, places, things and actions orally and in writing • understand basic grammar appropriate to the language being studied, including (where relevant): feminine, masculine and neuter forms and the conjugation of high-frequency verbs; key features and patterns of the language; how to apply these, for instance, to build sentences; and how these differ from or are similar to English
P.S.H.C.E.	1 Developing confidence and responsibility and making the most of their abilities. 2 Preparing to take an active role as citizens. 3 Developing a healthy and safer lifestyle. 4 Developing good relationships and respecting differences between people

SEAL	New Beginnings	Getting On and Falling Out (plus anti-bullying week)	Going for Goals	Good to be Me	Relationships	Changes